

(19)



JAPANESE PATENT OFFICE

PATENT ABSTRACTS OF JAPAN

(11) Publication number: 01284583 A

(43) Date of publication of application: 15.11.89

(51) Int. Cl

C09K 11/08  
C01G 9/08.  
H05B 33/14

(21) Application number: 63113499

(22) Date of filing: 12.05.88

(71) Applicant: MITSUBISHI METAL CORP

(72) Inventor: NISHIHARA AKIRA  
SAKAI YOICHI  
YOSHIZUMI MOTOHIKO

(54) EL PHOSPHOR BASED ON DISPERSED ZNS

(57) Abstract:

PURPOSE: To obtain the title phosphor used for an electroluminescent element consisting of a transparent conductive layer, a luminescent layer, and a back electrode, exhibiting excellent luminance and life, by covering a part of the surface of a ZnS phosphor particle with a metal oxide.

CONSTITUTION: ZnS is mixed with Cu, Mn, Al, Mg, etc., as activator and Cl, Br, I, etc., as co-activator. This

mixture is baked in an atmosphere of H<sub>2</sub>S to give ZnS phosphor particles, which are treated with an alkoxide of Ti, Al, Si or Zr and hydrolyzed to cover a part of the surface thereof with a metal oxide, such as TiO<sub>2</sub>, Al<sub>2</sub>O<sub>3</sub>, SiO<sub>2</sub> or ZrO<sub>2</sub>, in such an amount that the intensity of the Zn element of the ZnS phosphor, determined by X-ray photoelectron spectroscopy, is 30-90% of that of the Zn element of an uncovered ZnS phosphor.

COPYRIGHT: (C)1989,JPO&Japio